

IN THE CLAIMS

Please amend claims 1-24 to the following:

1. (Previously Amended) A method comprising:
depositing a zeolite - solvent solution on an underlying layer;
removing at least some of the solvent from the zeolite – solvent solution to form a zeolite
film; and
depositing a carbon doped oxide (CDO) in the zeolite film to form a zeolite – CDO
composite film;
etching a via opening and a trench opening in CDO-zeolite composite film;
forming a conductive material in the via opening and the trench opening.
2. (Original) The method of claim 1, wherein the solvent is water.
3. (Original) The method of claim 1, wherein the solvent is an organic oligomer.
4. (Original) The method of claim 3, wherein the organic oligomer is selected from a group
consisting of polyethylene glycol, poly styrene, poly (Methacrylates), Poly (acrylate), or
poly ethylene oxide.
5. (Original) The method of claim 1, wherein removing at least some of the solvent from the
zeolite – solvent solution comprises:
drying the zeolite – solvent solution.

6. (Original) The method of claim 1, wherein removing at least some of the solvent from the zeolite – solvent solution comprises:
vacuuming the zeolite – solvent solution.
7. (Original) The method of claim 1, wherein depositing the zeolite - solvent solution on the underlying layer comprises:
spin-coating the zeolite - solvent solution on the underlying layer.
8. (Original) The method of claim 1, wherein depositing the zeolite - solvent solution on the underlying layer comprises:
dip-coating the zeolite - solvent solution on the underlying layer.
9. (Original) The method of claim 1, wherein depositing the CDO in the zeolite film comprises:
chemical vapor deposition of the CDO in the zeolite film.
10. (Original) The method of claim 1, wherein the CDO is a silicon oxide.
11. (Original) The method claim 1, wherein the underlying layer is a wafer.
12. (Original) The method claim 1, wherein the underlying layer is an interlayer dielectric layer.
13. (Original) The method claim 12, wherein the interlayer dielectric layer comprises a zeolite – carbon doped oxide composite film.

14. (Original) The method of claim 1, further comprising calcinating the zeolite – CDO composite film to form a solid phase zeolite – CDO composite film.
15. (Original) The method claim 14, wherein calcinating the zeolite – CDO composite film comprises:
- heating the zeolite – CDO composite film; and
 - cooling zeolite – CDO composite film.
16. (Original) The method of claim 15, wherein heating the zeolite – CDO composite film is done in an oven.
17. (Original) The method of claim 16, wherein the oven is at a temperature in the range of 300°C to 550°C.
18. (Original) The method of claim 14, wherein the steps of depositing the zeolite - solvent solution, removing at least some of the solvent from the zeolite – solvent solution, and depositing a CDO are repeated before calcinating the zeolite – CDO composite film to achieve a thicker zeolite – CDO composite film.

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Withdrawn) An interconnect structure comprising:

at least a via and a trench defined by a carbon doped oxide (CDO) – zeolite composite

dielectric, which is disposed above an underlying layer;

a barrier layer disposed on the surfaces of the carbon doped oxide (CDO) – zeolite

composite dielectric; and

conductive material disposed in the via opening and the trench.

26. (Withdrawn) The interconnect structure of claim 25, wherein the CDO is a silicon oxide.

27. (Withdrawn) The interconnect structure of claim 25, wherein the barrier layer comprises tantalum.

28. (Withdrawn) The interconnect structure of claim 25, wherein the conductive material comprises a copper alloy.

29. (Withdrawn) The interconnect structure of claim 25, wherein the underlying layer is a wafer.